

The Madden-Julian Oscillation had a significant impact on the tropical atmospheric circulation during the last week. La-Nina conditions (low amounts of precipitation, stronger than average tradewinds, and below normal sea surface temperatures across the central Pacific) had dominated most of the circulation since last fall. This week, weaker than normal tradewinds spread across most of the equatorial Pacific with an area of observed westerly winds extending to near 170E.

The MJO signal showed propagation from phase 7 to phase 8 during the past week, which is associated with enhanced convection across the Pacific and into the Americas, and enhanced westerly winds across much of the equatorial Pacific Ocean. During Week-1, the progression of the MJO is forecast to slow considerably and the signal is expected to weaken significantly. Some model solutions regenerate a signal over the Maritime Continent during Week-2 while other models indicate regeneration as far east as the eastern Pacific Ocean.

During Week-1, the MJO and other tropical forcings should combine to create above normal precipitation across equitorial South America, the Lesser Antilles, and portions of western Africa. Dry

conditions should expand over southern Asia and extend eastward to near Micronesia and also from Central America to the Bahamas.

Week-2 should bring wet conditions to Central Africa and to northern South America for a second week. The couplet of above/below-average rainfall across South and Central America during Week-2 is forecast to move slight northward during Week-2. Continued dryness should persist from the Philippines to near Micronesia, although the signal in the forecasts are for a smaller area of below-average rainfall than in Week-1.